

Before the
Federal Communications Commission
Washington, D.C. 20554

Federal Communications Commission
Office of Secretary

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In the Matter of)
)
Advanced Television Systems)
and Their Impact Upon the) MM Docket No. 87-268
Existing Television Broadcast)
Service)

TO: The Commission

**PETITION FOR PARTIAL RECONSIDERATION OF
MIDWEST TELEVISION, INC.**

Midwest Television, Inc. ("Midwest"), licensee of station KFMB-TV, NTSC Channel 8, San Diego, California, and station WCIA-TV, NTSC Channel 3, Champaign, Illinois, hereby petitions the Commission to reconsider its decisions in the above-referenced proceeding, specifically (i) the assignment of DTV Channel 8 to KABC-TV, Los Angeles, and the other DTV allotments/assignments in the area that will destroy the service received by up to nearly 600,00 people from KFMB-TV's existing NTSC Channel 8 station; (ii) the assignment of DTV Channel 55 to KFMB-TV, which will result in spacing problems with Mexican NTSC allotments; and (iii) the assignment of DTV Channel 3 to WBBM-TV, Chicago, which will result in new interference that will in some areas destroy the public's service from WCIA-TV's NTSC Channel 3 station in Champaign.

The Commission faced a tremendous task in developing new DTV channel assignments for more than 1600 full power NTSC stations. Midwest recognizes that the

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magnitude of this task coupled with the limited spectrum available made it inevitable that there would be compromises and imperfect solutions. But, in particular, the assignment of DTV Channel 8 to KABC-TV in Los Angeles which threatens to wipe out KFMB-TV's ability to serve its existing NTSC Grade B contour is far more egregious than an imperfect solution. Accordingly, Midwest has no choice but to request that the Commission revise the table of allotments/assignments set forth in *Appendix B* to the *Sixth Report and Order* to address this and other concerns.

I. Harmful Interference Between KFMB-TV (NTSC Channel 8, San Diego) and KABC-TV (DTV Channel 8, Los Angeles)

As noted above, the most severe problem facing Midwest in connection with the DTV channel assignments results from the assignment of DTV Channel 8 to KABC-TV, Los Angeles. This assignment threatens to devastate KFMB-TV's existing NTSC operations in San Diego. The co-channel KABC-TV DTV and KFMB-TV NTSC facilities are separated by only 171.7 kilometers, *102 kilometers short* of the 273.6 kilometer separation requirement for new co-channel operations specified in Section 73.623(d) of the Commission's rules.^{1/} This 37.3% short-spacing would be unthinkable in the NTSC environment and should not be tolerated here.

Thus, it is not surprising that KABC-TV's DTV operations would threaten KFMB-TV's ability to continue serving viewers throughout much of its current NTSC Grade B contour. As shown in the attached engineering statement (Appendix 1), use of the Longley-Rice propagation model in accordance with the Commission's rules shows

^{1/} See *Appendix E* (page E-36) of the *Sixth Report and Order*.

that approximately 116,482 persons within the KFMB-TV NTSC Grade B contour will receive harmful interference from KABC-TV that will destroy their service from KFMB-TV.^{2/} This level of interference to KFMB-TV's NTSC operations would cripple KFMB-TV's ability to continue serving its current NTSC Grade B coverage area.

The situation is far worse than that figure indicates, however. As the engineering statement goes on to point out, the loss figure of 116,482 obtained using the Commission's methodology dramatically underrepresents the population within KFMB-TV's NTSC Grade B contour vulnerable to harmful interference from KABC-TV's Channel 8 DTV operations in Los Angeles. Indeed, the new co-channel DTV operations of KABC-TV would jeopardize the service of *almost 600,000 persons* in KFMB-TV's NTSC Grade B contour. The impact of such interference on KFMB-TV would be devastating.

This underestimation of potential interference results because there are numerous areas within KFMB-TV's Grade B contour for which, in the opinion of our consulting engineers Hammett & Edison, Inc., the Commission's propagation and interference analysis fails. The Commission has assumed these areas (the "error locations") to be free from interference, whereas in fact, the Commission's analysis cannot determine whether or not interference will occur in such error locations. For

^{2/} *Appendix B to the Sixth Report and Order* states that only 2.6% of the persons in KFMB-TV's Grade B contour will be subject to new interference from DTV operations. But as shown in Appendix 1 hereto, Hammett & Edison, Inc., used the Commission's own DTV rules for calculating interference and concluded that 116,482 persons would lose service. It believes that *Appendix B to the Sixth Report and Order* is simply wrong in predicting 2.6% interference on a populations basis.

facilities located in areas of flat terrain, there generally will be few error locations resulting from failures in the Commission's propagation and interference analysis. In regions with mountainous terrain, however, such error locations would comprise a large part of a given station's coverage area. This is the situation that KFMB-TV confronts.

As the engineering statement in Appendix 1 demonstrates, there are numerous error locations within KFMB-TV's Grade B contour where the Commission could not determine whether KFMB-TV's NTSC Channel 8 in San Diego would receive interference from KABC-TV's DTV Channel 8 in Los Angeles. These error locations encompass approximately 20% of KFMB-TV's NTSC Grade B coverage area, representing a U.S. population of 587,697 persons. Thus, the DTV Channel 8 assignment to KABC-TV in Los Angeles jeopardizes the service of almost 600,000 viewers in KFMB-TV's NTSC Grade B coverage area.

Similarly, the Commission failed to consider the error locations within KABC-TV's coverage area indicating potential interference from KFMB-TV's existing NTSC operations. According to the methodology set forth in the Commission's rules, 293,967 persons within KABC-TV's DTV service area would be subject to interference from KFMB-TV's co-channel NTSC operations. This figure alone should persuade the Commission to change KABC-TV's DTV assignment. But again, this figure fails to take into account the error locations within KABC-TV's service area, which demonstrate that a staggering *1,143,268 additional persons* are vulnerable to harmful interference from KFMB-TV.

Even under the Commission's methodology, the level of interference to KFMB-TV (NTSC Channel 8) resulting from the assignment of Channel 8 to KABC-TV in Los Angeles clearly exceeds a reasonable level. This interference coupled with the short-spacing of the co-channel facilities itself provides a compelling reason for the Commission to reconsider its assignment of DTV Channel 8 to KABC-TV. To add to these problems, each of these co-channel operations threatens massive interference to the other that has been completely disregarded by the Commission's calculations.

The interference problems caused by KABC-TV's DTV assignment appear not to have a simple solution, and Midwest does not propose one here. At this point, Midwest has only quantified the injury it will face if the current DTV allotments/assignments are implemented in the Los Angeles/San Diego area. In light of the ripple effect resulting from proposed changes in channel assignments and the congested nature of the California coastal region, Midwest believes that a regional solution is necessary in order to resolve its interference problems and the problems of other stations in the California coastal area. Midwest understands that the Association for Maximum Service Television, Inc. ("MSTV"), along with members of the Broadcasters Caucus and other broadcasters, is today filing a petition for reconsideration in the instant proceeding urging the Commission to adopt a regional fix to the DTV allotments/assignments in the California coastal region. Midwest vigorously supports this approach, is a signatory to that petition and is committed to cooperating in the effort to develop and implement such a regional solution.

II. Violation of Spacing Requirements Set Forth in the Memorandum of Understanding Between Mexico and the United States

The Commission assigned KFMB-TV Channel 55 for its San Diego DTV facility. As explained in the engineering statement attached as Appendix 1, this assignment violates the spacing requirements established in the recent Memorandum of Understanding between Mexico and the United States with respect to an NTSC Channel 57 allotment in Tijuana, Mexico. While it does not appear that the Mexican station would cause harmful interference to KFMB-TV's DTV station, KFMB-TV's DTV operation could cause interference to the Mexican station. Thus, it is likely that an application by KFMB-TV to build out the Channel 55 DTV facilities would require Mexican concurrence, which may not be readily attained.

We request that the Commission consider this violation of the spacing requirements agreed to by the United States and Mexico in the Memorandum of Understanding in the Commission's reconsideration of the channel allotments/assignments set forth in the *Sixth Report and Order*. We have investigated a number of potential alternative channels for KFMB-TV's DTV operation, and have been unable to identify a simple fix for the spacing problem. Therefore, we again urge the Commission to consider a regional solution for stations in the California coastal region. A regional approach likely will provide the most effective means for addressing the allotment/assignment problems of stations in this area, including the spacing problem resulting from KFMB-TV's Channel 55 DTV assignment.

III. New DTV Interference to WCIA-TV's NTSC Station in Champaign

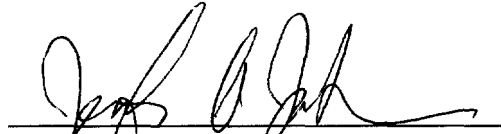
Midwest is the licensee of WCIA-TV, which operates on NTSC Channel 3 in Champaign, Illinois. WBBM-TV in Chicago, Illinois has been assigned Channel 3 for its DTV operations. As shown in the engineering statement attached as Appendix 2, WBBM-TV's co-channel DTV operations will cause a substantial amount of new interference to WCIA-TV's existing NTSC operation in Champaign. Based on the Longley-Rice propagation model, WBBM-TV's DTV operations on Channel 3 in Chicago will cause harmful interference over a 5,656 square kilometer area within WCIA-TV's NTSC Grade B contour, causing interference for approximately 95,000 people (35,000 households). A significant portion of these persons already are subject to harmful interference from existing NTSC operations, and the added interference from WBBM-TV's DTV operation would only compound this problem. In addition, WBBM-TV's DTV operation will result in *new* interference to approximately 28,000 people (11,000 households) within an area of about 2,450 square kilometers.

The new interference that would be caused to WCIA-TV by WBBM-TV's proposed co-channel DTV operation is far from *de minimis*. It is our understanding that MSTV and the other broadcasters have identified the Great Lakes region, including the Chicago area, as another problem area requiring a regional solution. Midwest strongly supports a regional approach for addressing the interference problems faced by WCIA-TV and other NTSC stations in this region, and plans to participate in the effort to identify and implement such a solution.

IV. Conclusion

For the reasons set forth above, Midwest strongly urges the Commission to change the DTV channel assigned to KABC-TV in Los Angeles (DTV Channel 8), and requests that the Commission reconsider its DTV allotments to KFMB-TV (DTV Channel 55, San Diego) and WBBM-TV (DTV Channel 3, Chicago). Specifically, Midwest urges the Commission to endorse regional fixes for the California coastal region and the Great Lakes region where these stations are located, as proposed by the petition for reconsideration filed by MSTV and the other broadcasters in the instant proceeding.

Respectfully submitted,



Kurt A. Wimmer
Jennifer A. Johnson

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Counsel for Midwest Television, Inc.

June 13, 1997

Appendices

Station KFMB-TV • Channels N8/D55 • San Diego, California

Statement of Stanley Salek, Consulting Engineer

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Midwest Television, Inc., licensee of Station KFMB-TV, San Diego, California, to study the interference potential created by the co-channel allotment of TV Channel 8 for the digital television facilities of Station KABC-TV, Los Angeles, California.

Background

Station KFMB-TV is licensed to operate its NTSC television broadcasting facilities on Channel 8, with an effective radiated power ("ERP") of 316 kilowatts at a height above average terrain ("HAAT") of 226 meters, serving San Diego and the surrounding area. Station KABC-TV is licensed to operate its NTSC television broadcasting facilities on Channel 7, with 141 kilowatts ERP at 978 meters HAAT, serving Los Angeles and the surrounding area. The Sixth Report and Order to FCC Mass Media Docket 87-268 ("Sixth Report and Order"), released April 21, 1997, allotted Channel 8 for the digital television ("DTV") facilities of KABC-TV. The co-channel KFMB-TV NTSC and KABC-TV DTV facilities are separated by 171.7 kilometers, 102 kilometers short of the 273.6 kilometers specified in FCC Rule Section 73.623(d).

Deficiencies in Allotment Calculations

Appendix B to the Sixth Report and Order describes calculations and methodology used to develop the DTV Table of Allotments. Section 73.623(c)(2) of the revised FCC Rules references Appendix B as providing the procedure used to evaluate proposed modifications to allotted DTV facilities, along with Office of Engineering and Technology ("OET") Bulletin No. 69 which, as of this date, has not been released by the FCC. Appendix B provides a five-page summary of the procedures used to develop the allotment table, but by no means provides adequate guidance for conducting interference evaluations involving the newly-allotted DTV channels, with regard to potential interference to/from existing authorized NTSC facilities, or to/from other allotted DTV facilities.

In order to provide guidance to its clients that have received DTV allotments, Hammett & Edison obtained, directly from FCC OET, a copy of the computer software program used to generate the DTV allotment table. Once that software was operating properly and generating data consistent with that found in Appendix B, Table 1, presenting DTV allotment pairings with analog NTSC stations, the program was modified to serve as an analysis tool to study allotted DTV facility interference profiles and the effect of potential facility changes. This "forward looking" analysis program, as we have dubbed it, implements the desired-to-undesired ("D/U") ratios and taboo channels of revised Rule 73.623(c)(2), as opposed to the limits specified by the Advanced



Station KFMB-TV • Channels N8/D55 • San Diego, California

Television Systems Committee for the Grand Alliance System¹ used by the FCC allotment computer program. A two-page description of that program accompanies this statement and is attached as Figure 1.

In its allotment study, the FCC calculated that 2.6% of the KFMB-TV NTSC Grade B population could receive interference from the proposed co-channel KABC-TV DTV facility. Our analysis program predicted 116,482 persons within the KFMB-TV NTSC Grade B contour, covering an area of 397 square kilometers, who could receive interference from the KABC-TV DTV facility, which corresponds reasonably well with the FCC's figure, considering that the FCC program used some different D/U ratios and taboo channel studies. From our initial experience with the analysis program, we discovered that the Longley-Rice propagation model used by the Commission often returned errors on some studied paths, which resulted in the FCC allotment program (and, correspondingly, the Hammett & Edison analysis program) counting the associated error "cells" as *interference-free service area*. For facilities located on flat terrain, such as in areas of the midwest and in Florida, we have found that those error cells are generally few and the FCC's assumption of interference-free service in these areas does not greatly impact the overall results. However, in areas of mountainous terrain, we have found that the error cells can result within a significant part of a studied station's coverage area and can result in the Commission substantially underestimating the extent of interference.

Figure 2 shows a map of the interference study for areas within the NTSC Grade B contour of KFMB-TV. Interpretation of the symbols is as follows: Asterisks are calculated interference cells, while circled plus signs represent cells where the Longley-Rice propagation algorithm fails, and hence it is doubtful whether they should be counted as interference-free service areas. Areas without symbols represent "verified" interference-free coverage. As can be seen, there are numerous "circled plus sign" areas, at which the FCC could not determine if interference existed or not, representing an additional U.S. population, based on the 1990 Census, of 587,697 persons.² Thus, the area of uncertainty in the interference calculations represents about 20% of the population within the KFMB-TV NTSC Grade B contour. Similarly, Figure 3 shows a map of predicted interference to the KABC-TV DTV facility by the KFMB-TV NTSC facility. The FCC study method predicts interference by KFMB-TV to 293,967 persons within the KABC-TV DTV service area, but the added area of assumed interference-free service due to propagation algorithm failure (some or all of which may be subject to destructive interference) includes 1,143,268

¹ Appendix A, Part II, to the Sixth Report and Order, pages A-2 and A-3.

² While areas within Mexico are shown as being analyzed, no Mexican population has been included in the tabulation. Similarly, calculated Longley-Rice error cells shown over water contain no population.



Station KFMB-TV • Channels N8/D55 • San Diego, California

persons. Clearly, not only is the level of interference predicted under the Commission's Rules substantial, but the additional areas of possible loss due to interference provides another compelling reason to adjust the DTV allotment table in this case.

List of Figures

In carrying out these engineering studies, the following attached figures were prepared under my direct supervision:

1. Paper describing DTV interference analysis program methodology
2. Map showing calculated interference and Longley-Rice propagation model error locations within calculated KFMB-TV NTSC Grade B contour
3. Map showing calculated interference and Longley-Rice propagation model error locations within calculated KABC-TV NTSC Grade B contour.

June 11, 1997



A handwritten signature in black ink, appearing to read "Stanley Salek", written over a horizontal line.

Stanley Salek, P.E.



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Affidavit

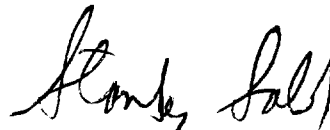
State of California

County of Sonoma

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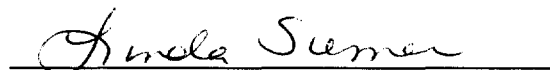
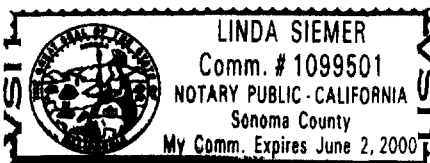
Stanley Salek, being first duly sworn upon oath, deposes and says:

1. That he is a qualified Registered Professional Engineer, holds California Registration No. E-14217 which expires on June 30, 2001, and is employed by the firm of Hammett & Edison, Inc., Consulting Engineers, with offices located near the city of San Francisco, California,
2. That he graduated from Florida Institute of Technology with a Bachelor of Science degree in Electrical Engineering in 1981, was employed from 1981 to 1991 in the field of radio engineering at companies including Motorola, Inc., Broadcast Electronics, Inc., Circuit Research Labs, Inc., and the National Association of Broadcasters, and has been associated with the firm of Hammett & Edison, Inc., since July 1991,
3. That the firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Midwest Television, Inc., licensee of Station KFMB-TV, San Diego, California, to study the interference potential created by the co-channel allotment of TV Channel 8 for the digital television facilities of Station KABC-TV, Los Angeles, California,
4. That such engineering work has been carried out by him or under his direction and that the results thereof are attached hereto and form a part of this affidavit, and
5. That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge except such statements made therein on information and belief and, as to such statements, he believes them to be true.



Stanley Salek, P.E.

Subscribed and sworn to before me this 11th day of June, 1997



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

970601
Affidavit

DTV.IXSTUDY™ Analysis Methodology

Implementation of FCC's Interference-Based Allocation Algorithm

On April 21, 1997, the Federal Communications Commission released its Sixth Report and Order to Mass Media Docket No. 87-268, establishing a final Table of Allotments for the transition from analog NTSC television service to a digital television ("DTV") service. The Commission utilized a complex set of computerized analysis tools to generate the DTV allotment table and added FCC Rules Section 73.623(b)(2), requiring that similar tools be employed to analyze individual DTV station assignments with regard to their potential interference to other DTV stations, DTV allotments, and existing or authorized NTSC facilities. Hammett & Edison has developed computer software to perform this function, based on an examination of the FCC software source code.

For any given NTSC or DTV station to be studied, the FCC analysis model first determines the location of the conventional F(50,50) Grade B contour of the NTSC station, or of the NTSC station associated with an assigned DTV station, using pattern information contained in the FCC engineering database and an assumed antenna elevation pattern. The model assumes that contour as an envelope, outside of which no protection from interference is implied or afforded. The location of the Grade B contour is also used to determine the assigned power for the DTV station, once again using conventional methods found in FCC Rules Section 73.699, Figures 9 and 10, but determining the power necessary on a radial basis to generate the associated DTV coverage contour (41 dBu for UHF, 36 dBu for high VHF Channels 7–13, and 28 dBu for low VHF Channels 2–6), for the assigned DTV channel. The maximum power determined using this method was assigned as the DTV operating power, provided it was calculated to be above established minimum power levels; otherwise, a minimum power level was assigned. Note that the use of this method usually creates a directional antenna pattern, even for DTV assignments to presently omnidirectional NTSC TV stations. The FCC requires that a DTV facility employ an antenna design that meets the calculated pattern, or that a nondirectional antenna be employed that does not exceed the directional pattern envelope in any direction, unless the creation of no new interference can be demonstrated.

In addition to the use of the Grade B envelope and an assumed directional transmitting antenna for all DTV facilities, the model assumes the use of directional receiving antennas at each studied location, or "cell." The characteristics of the receiving antennas are different not only for the low VHF, high VHF, and UHF frequency bands, but also for NTSC and DTV receiving situations, where, based on the FCC model, more directive antennas are employed for analysis of DTV reception.



The FCC analysis technique employs terrain-sensitive calculation methods based on Version 1.2.2 of the ITS Irregular Terrain Model, also known as the Longley-Rice model. For each NTSC or DTV station to be studied, a grid of cells, two kilometers on a side, fills the associated Grade B contour. The program first determines which of the cells is predicted to receive service from the associated station, using Longley-Rice with F(50,50) statistical weighting for NTSC stations and F(50,90) statistical weighting for DTV stations. Cells determined to have no service are not studied for interference from other stations.* Once cells having service are determined, the software analyzes potential interference from other NTSC or DTV stations, again using the Longley-Rice propagation algorithm and F(50,10) statistical weighting for all potential interfering signals. Each cell is evaluated using the desired-to-undesired ratios presented in FCC Rules Section 73.623 for each channel relationship, and cells determined to have interference are flagged and summed with the study results of other cells, resulting in the generation of total interference area figures and tabulations of total population contained within the summed cells.

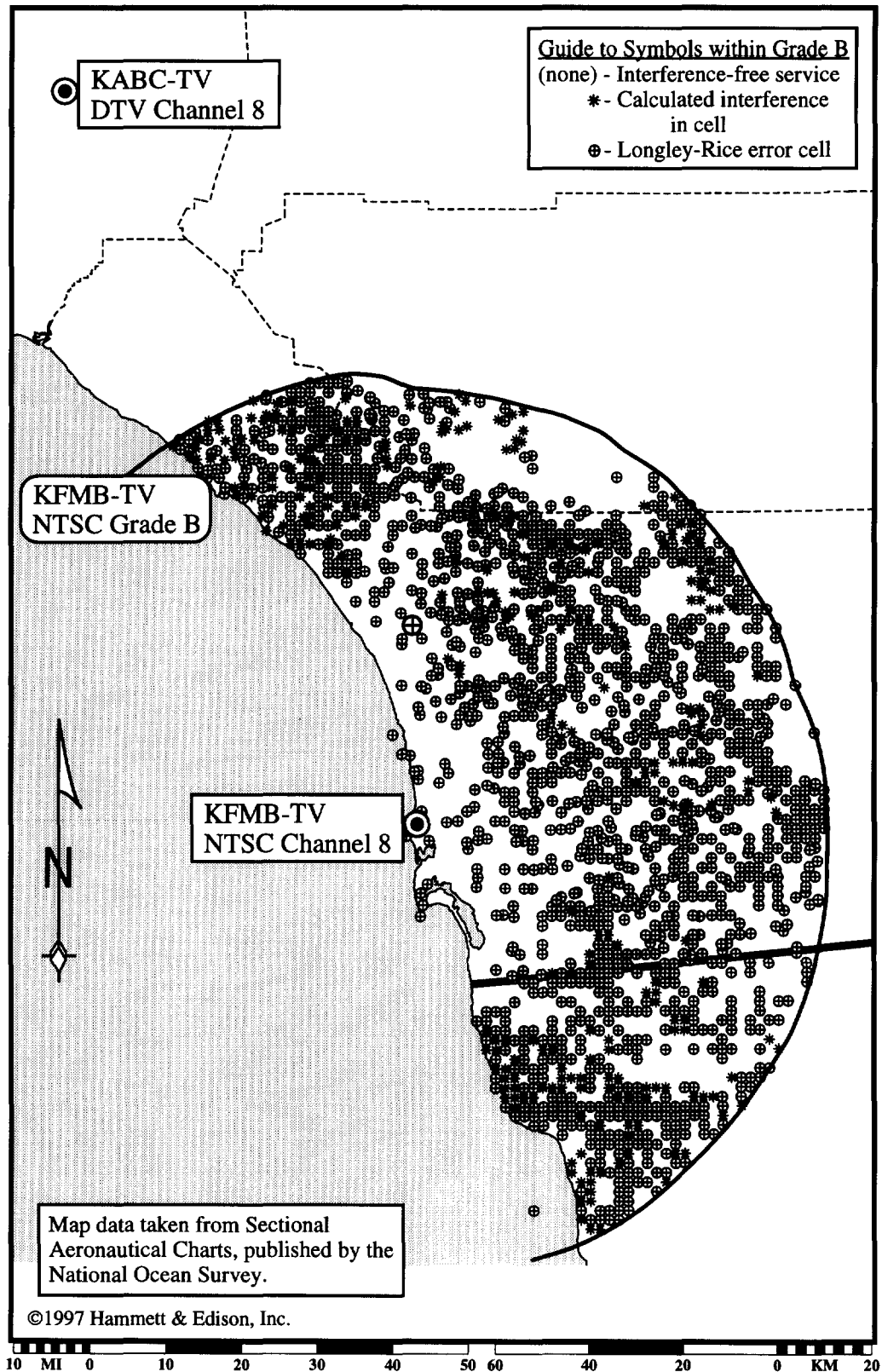
The Hammett & Edison analysis software program employs all of the analysis features described above, as well as several other more subtle elements employed in the FCC allotment program. Additionally, the Hammett & Edison program provides a graphical element that allows the identification of all interference cells on a map with an associated tabulation, and the program generates a DTV antenna pattern envelope that shows areas that can be maximized without creating interference in any cells that were not already receiving interference. The program can be used to test implementation scenarios that involve changes to antenna height, antenna pattern, channel number, and transmitter location. Additionally, the program has the capability to determine coverage areas of DTV and NTSC stations, with interference cells omitted. The Hammett & Edison program can also identify cells that fall in major bodies of water, based on digitized map data, summarizing those cells separately in an interference study or excluding them from a coverage study. Arguably, cells in water do not require protection from interference.

* It is noted that the Longley-Rice model is not always capable of determining, within certain confidence limits, whether a particular block has service. In such cases, the Longley-Rice algorithm returns an error code; the FCC method for handling such error codes is to assume the associated cells have interference-free service, and as such, are not considered further. This assumption is presently being scrutinized by Hammett & Edison to determine its validity and to identify possible situations where significant actual interference areas may be overlooked from station studies.



Station KFMB-TV • Channels N8/D55 • San Diego, California

Calculated KABC-TV DTV Interference to KFMB-TV NTSC
Plus Longley-Rice Error Cell Locations
Determined Using FCC Algorithms

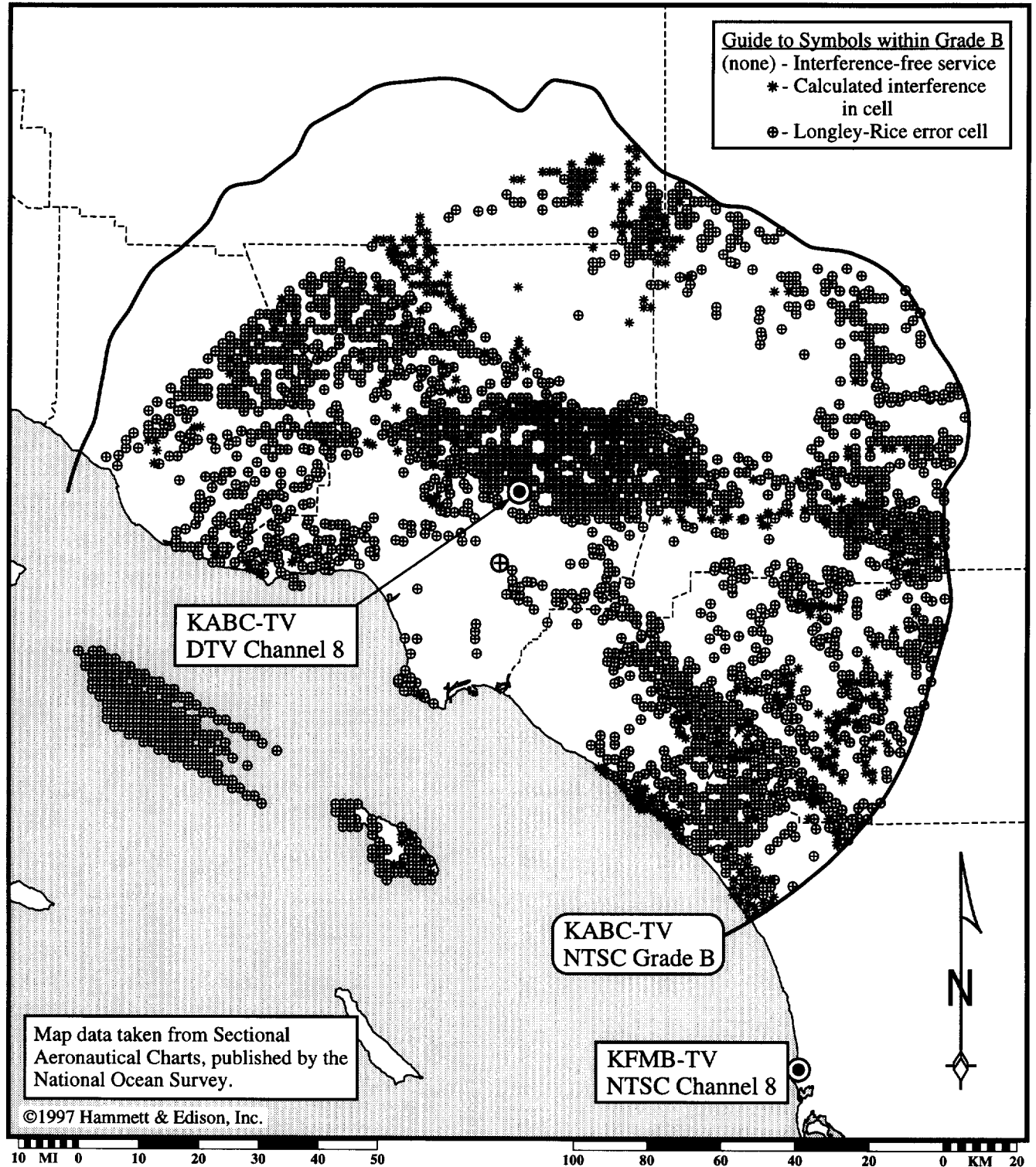


HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

970601
Figure 2

Station KFMB-TV • Channels N8/D55 • San Diego, California

Calculated KFMB-TV NTSC Interference to KABC-TV DTV
Plus Longley-Rice Error Cell Locations
Determined Using FCC Algorithms



HAMMETT & EDISON, INC.
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Figure 3

TECHNICAL STATEMENT
SUPPORTING A PETITION FOR RECONSIDERATION
FROM MIDWEST TELEVISION, INC.

This Technical Statement supports a petition for reconsideration from Midwest Television, Inc., licensee of television (TV) station WCIA on channel 3 at Champaign, Illinois. The petition for reconsideration concerns the Federal Communications Commission (FCC) Sixth Report and Order (6th R&O) in Mass Media (MM) Docket No. 87-268. The proceeding concerns advanced television systems and their impact upon the existing television broadcast service. In the 6th R&O, the FCC allotted digital television (DTV) channels to eligible stations throughout the country. The WCIA petition for reconsideration requests the FCC to revise the DTV allotments in the central region (Chicago, Illinois area) to reduce the substantial interference resulting from the current allotment scheme.

According to the FCC's TV database, station WCIA presently operates on analog¹ channel 3 with a non-directional antenna system. The visual effective radiated power (ERP) is 100 kilowatts (kW). The antenna height above average terrain (HAAT) is 287 meters (940 feet).

The FCC allotted DTV channel 48 to WCIA. The DTV transmitting facilities authorized are an ERP of 1000 kW at an

¹ Also referred to as NTSC channels for the National Television Systems Committee

antenna HAAT of 287 meters.

A DTV interference analysis computer program available through TA Services of the National Telecommunications Information Agency (NTIA) in Boulder, Colorado has been employed. It has been used to determine the calculated areas of service and interference for analog and DTV operations. The NTIA program uses the Longley-Rice propagation model, and general methodology employed by the FCC during the DTV allocation process.

Figure 1 is a map developed by the NTIA computer program. It shows the calculated Grade B service area for the WCIA analog operation on channel 3. The map shows regions of calculated interference from new DTV operations. Areas where the WCIA signal is below Grade B due to terrain effects are indicated. The clear or unshaded area indicates where WCIA provides calculated Grade B service. The following DTV station is calculated to cause interference within the WCIA Grade B service area.

<u>Station</u>	<u>Channel</u>	<u>Interference Received Area</u>
WBBM-TV, Chicago, IL	DTV-3	5,656 sq km

A study for WCIA's present analog operation (channel 3) was conducted using the FCC's new separation standards. The following are the pertinent DTV allotments near WCIA.

du Treil, Lundin & Rackley, Inc.

A Subsidiary of A.D. Ring, P.A.

Midwest Television, Inc.

Page 3 of 4

<u>Station</u>	<u>NTSC Ch.</u>	<u>DTV Ch.</u>	<u>Bearing</u>	<u>Actual Separation</u>	<u>FCC Minimum Requirement</u>
WBBM-TV, Chicago, IL	2	3	19 deg.	210.9 km	244.6 km

As demonstrated above, the FCC made a major co-channel short-spacing in its allotment table attached to the 6th R&O. The WBBM-TV DTV allotment on channel 3 will cause substantial interference within WCIA's current analog service area (an estimated population of 95,000 people or 35,000 households within an area of approximately 5,656 square kilometers).

A portion of the calculated interference to WCIA's analog operation from the DTV operation of WBBM-TV on channel 3 also receives interference from other analog (NTSC) operations. An estimated population of 28,000 people (11,000 households) within an area of 2,450 square kilometers would receive new interference from WBBM-TV's DTV operation on channel 3.

Unfortunately, this firm does not have the computer software to redo the DTV channel allotment table in the central (Chicago) corridor which would result in a more favorable DTV allotment scheme where less interference is caused and received between analog and DTV assignments. It is our understanding, however, that this is being done by MSTV.

In summary, WCIA has demonstrated that substantial interference will be received by its analog operation from the FCC's proposed DTV allotment for station WBBM-TV. Station

du Treil, Lundin & Rackley, Inc.

A Subsidiary of A.D. Ring, P.A.

Midwest Television, Inc.

Page 4 of 4

WCIA requests the FCC to assign an alternative DTV channel to station WCIA. If there are questions concerning this Technical Statement, please contact the office of the undersigned.

A handwritten signature in cursive script that reads "John A. Lundin".

John A. Lundin

du Treil, Lundin & Rackley, Inc.
240 North Washington Boulevard
Suite 700
Sarasota, Florida 34236

(941) 366-2611

June 10, 1997

Figure 1

WCIA NTSC CHANNEL 3

TA Services
CAC
Interference study
21-Apr-97 22:41:13
RS146Jun0497Z2.ques

Signal to Interference ratio

- ☐ No Interference
Area: 26850. sq km
Population: 822000.
Households: 307000.
- ☐ HDTV Interference
Area: 5680. sq km
Population: 95000.
Households: 35000.
- ☐ NTSC Interference
Area: 0. sq km
Population: 0.
Households: 0.
- ☐ Signal below minimum
Area: 90040. sq km
Population: 5716000.
Households: 2120000.

